5

10

Abstract

A memory control system and method is disclosed. The system includes cache tag logic and an optional cache coupled to a main memory. If available, the cache retains a subset of the data stored within the main memory. This subset is selected by programmable control indicators. These indicators further control which data will be recorded by the tag logic. The indicators may select the sub-sets based on which type of memory request results in the return of data from the main memory to the cache, for example. Alternatively, or in addition, these indicators may specify the identity of a requester, a memory response type, or a storage mode to control the selection of the sub-sets of data stored within the cache and recorded by the tag logic. In one embodiment, data may be tracked by the cache tag logic but not stored within the cache itself.